

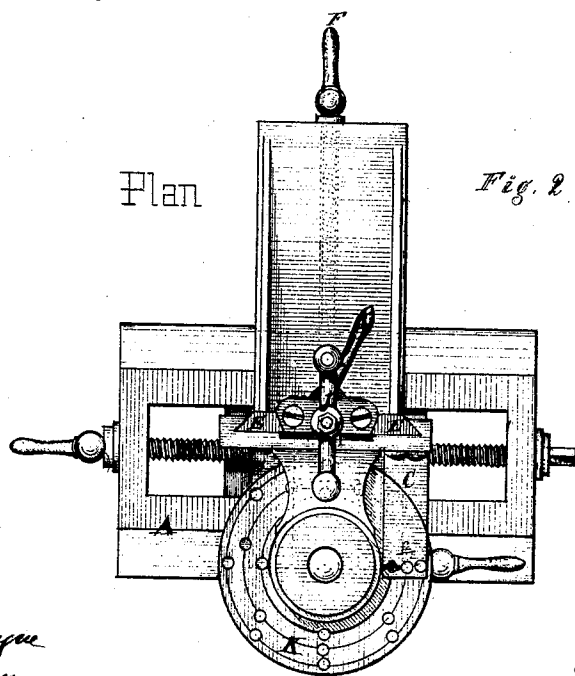
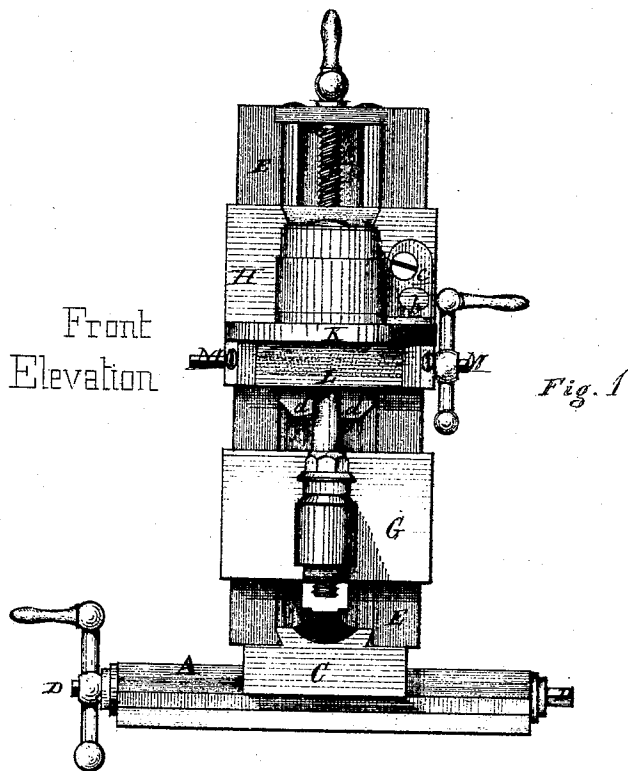
J. Flower,

2, Sheets, Sheet 1

Dressing Nuts.

No. 101,249.

Patented Mar. 29, 1870.



Witnesses
H. S. Sprague
James Flower

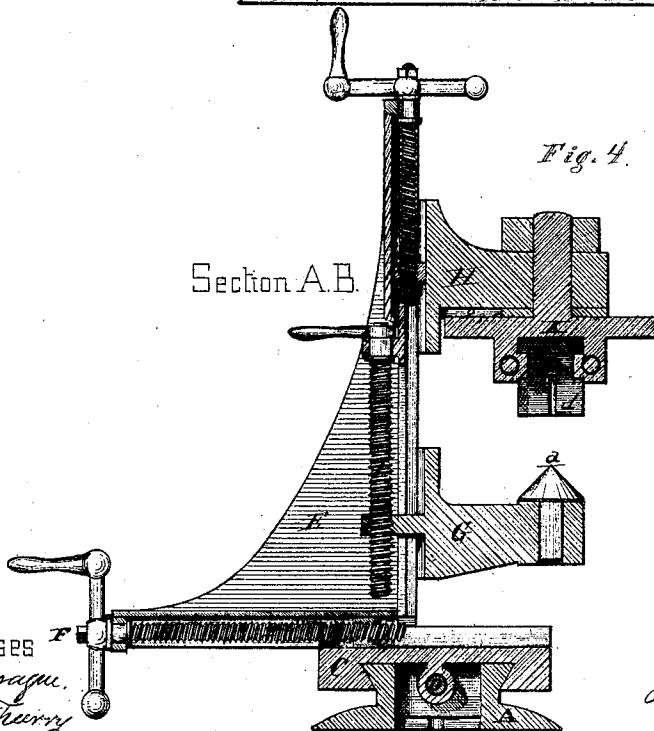
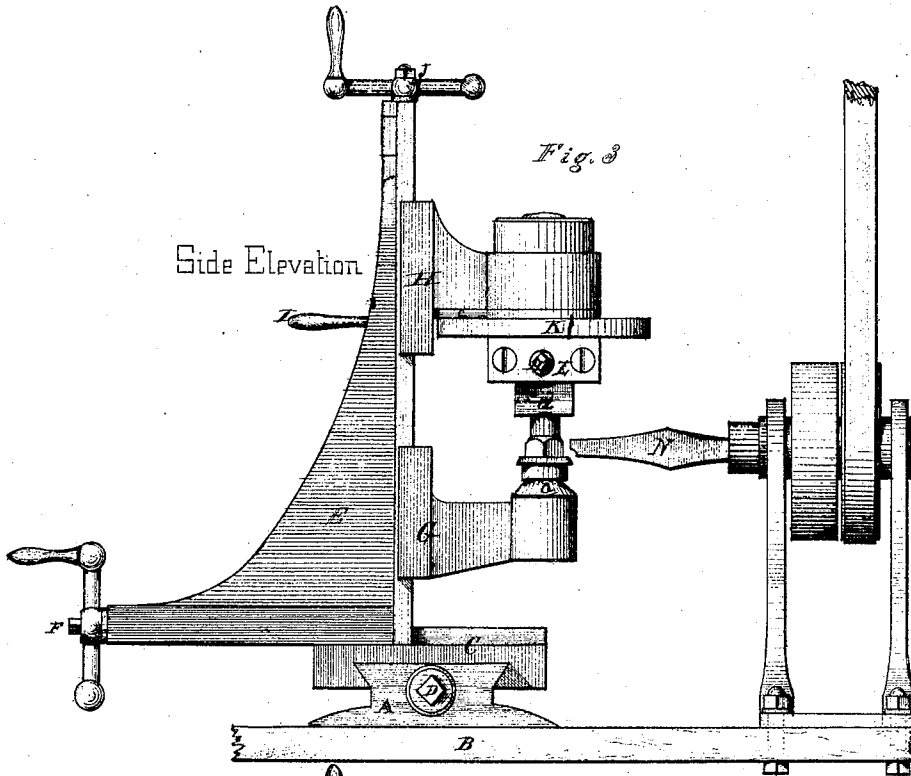
Inventor
James Flower
By Attorney
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J. Flower, 2. Sheets, Sheet 2.

Dressing Nuts.

No. 101,249.

Patented Mar. 29, 1870.



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United States Patent Office.

JAMES FLOWER, OF DETROIT, MICHIGAN.

Letters Patent No. 101,249, dated March 29, 1870.

IMPROVEMENT IN LATHE FOR SQUARING NUTS, &c.

The Schedule referred to in these Letters Patent and making part of the same

To whom it may concern:

Be it known that I, JAMES FLOWER, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Lathe-Attachment for Squaring Nuts and other like articles; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying plates of drawings and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1, plate 1, is a front elevation of my squaring-machine.

Figure 2 is a plan view of the same.

Figure 3, plate 2, is a side elevation of the same as attached to a lathe, and showing the operation of the tool in squaring a nut.

Figure 4 is a vertical section of the same.

Like letters indicate like parts in each figure.

The nature of this invention relates to the construction of a device to be attached to and operating in connection with a lathe for squaring the sides of nuts and similar articles.

It consists in the peculiar construction and arrangement, on a bed-plate transversely secured on the ways of a lathe, of certain adjustable standards, sustaining an adjustable center for the work to be faced, and an adjustable chuck in which the work is secured, and in combination therewith, an index-plate, so divided off as to present as many faces of the work to the action of a half-lipped drill, rotating with the head-spindle of the lathe, as may be desired, speedily finishing each facet in uniform size with the rest, and effecting a great saving in files, time, and labor, besides securing greater uniformity than is possible where such work is done by hand.

In the drawings—

A represents a bed-plate, transversely secured to the ways B of a lathe.

C is a rest, dovetailed in ways on the bed-plate, receiving its motion from a screw, D.

In transverse dovetail ways on the rest a standard, E, is erected, receiving its motion (parallel with the ways of the lathe) from a screw, F, as shown in fig. 4.

The edges of the upright part of the standard are ways, on which are placed two brackets, G and H, the lower one, G, receiving a vertical motion from a screw, I, at the back of the standard.

On the end of the bracket is a center, *a*, on which the nut or work to be faced is centered.

The upper bracket is adjusted in like manner by the screw *j*.

On the outer end of this bracket an index-plate, K, is journaled, whose center is coincident with that of the center *a* below.

The index-plate is laid off so as to be arrested by a pin, *b*, passing through one of the holes in the strut *c*, projecting from the upper bracket, four, six, or eight times in a rotation, or as many times as may be desired to present new faces of the work to the action of the tool.

L is a chuck, whose jaws, *d*, are caused to approach or recede from the common center by the right-and-left screw M, and are designed to grasp and hold the work when it is centered on the center *a*.

In fig. 3 is shown the operation of the tool N, rotating with the lathe-spindle. The tool is a square-edged drill with one lip ground away, as this form of tool is easier sharpened and trued than the double-lipped drill of ordinary construction.

The operation of the device is as follows:

A nut to be squared or faced is driven on a mandrel, the lower end of which is centered at *a*, and the upper gripped in the jaws of the chuck. The work is then adjusted to the plane of the drill N, and fed up to it by the feed-screw F. The standard is then moved across the face of the drill by the screw D, which, in its rotation, removes the metal from the surface of the nut. The drill being ground on side as well as on end, cuts away the metal so as to leave a shoulder. The pin *b* is then removed, and the index-plate rotated to bring the next hole under the strut, and is secured by the pin again. This brings another face of the nut to the action of the drill, and the operation is repeated until all the sides of the nut are presented to the action of the drill, producing a nut whose sides or faces are uniform in size.

Any convenient number of nuts may be placed on a mandrel and squared up, in one adjustment of the mandrel on the center and in the chuck, as well as a single nut. All squares or hexagons on cocks, faucets, or similar work, can be finished up in like manner.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The construction and arrangement of the index-plate K, provided with pin *b* and strut *c*, and chuck L, rotating in the bracket H, as and for the purpose set forth.

2. The construction and arrangement of the bed-plate A, rest C, standard E, brackets G H, center *a*, index-plate K, chuck L, adjusting and feed-screws D, F, I, J, and M, substantially as described and for the purpose specified.

JAMES FLOWER.

Witnesses:

H. F. EBERTS,
H. S. SPRAGUE.